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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

START-02-F-01530

TRANSMITTAL MEMO

To: Jeff Bechtel, TM
Removal Action Branch, U.S. EPA Region II

From: Adly A. Michael, Data Reviewer
START Region II

Subject: Color Technology Site

Date: 17 December 1997

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

  Metals 11 samples

- Matrices and Number of Samples:

  Wipes 11 samples

- Sampling date: 19 September 1997

The final data assessment narrative and original analytical data package are attached.

cc: START PM Michael Mahnkopf
START FILE TDD #: 02-97-05-0021
Analytical TDD #: 02-97-09-0013
PCS #: 2117

U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: 17 December 1997

TO: Jeff Bechtel, TM
Removal Action Branch, USEPA Region II

FROM: Adly A. Michael
START Data Review Team

SUBJECT: **QA/QC Compliance Review Summary**

As requested quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness	Blanks
Calibration	Calibration Check Standards

Any statistical measures used to support the following conclusion.

Summary of Analyses Results

	I VOA	II BNA	III Metals	IV Others
Acceptable as Submitted	____	____	____	____
Acceptable with Comments	____	____	X	____
Unacceptable, Action Pending	____	____	____	____
Unacceptable	____	____	____	____

Data Reviewed by: Adly Michael Date: 12/17/97

Approved By: [signature] Date: 12/17/97

Area Code/Phone No.: (732) 225-6116

NARRATIVE

CASE No. 2117

SITE NAME: Color Technology Site

Laboratory Name: Industrial Ccorrosion Management (ICM)

INTRODUCTION:

The laboratory's portion of this Case consisted of 11 samples collected on 9/19/97. The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported No problems with the analyses of the samples.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

IV. Inorganic:

_Y_ Data Summary/Tablulated Results
_Y_ Initial and Continuing Calibration
_Y_ Blanks
_Y_ ICP Interference Check
_Y_ Spike Sample Recovery
_Y_ Duplicates
_Y_ Detection Limits
_NA_ Standard Addition Results
_Y_ ICP Serial Dilutions
_Y_ ICP Linear Ranges
_Y_ ICP Interelement Correction Factors
_Y_ Holding Times
_Y_ Chain of Custody
_Y_ Raw Data
_Y_ Quantitation, Conversions, Dilutions, etc.

Comments:

1. Refer to Tabulated Results.

Title: Evaluation of Inorganic Data for the Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Case #: 2117 **Site: Color Technology Site** Matrix: Soil:

SDG#: CTS001 **Lab: Industrial Corrosion Management, Inc.** Aqueous: Wipes: 11

Contractor: WESTON-START **Reviewer: Adly A. Michael**

A.2.1 Validation Flags- The following flags have been applied in red by the data validator and must be considered by the data user.

J- This flag indicates the result qualified as estimated.

Red- Line- A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data- The results that do not carry "J" or a "redline" are fully usable.

Contractual Qualifiers- The legend of contractual qualifiers applied by the laboratory on Form I's is found on page B-20 of SOW ILM01.0.

A.2.2 The data assessment is provided below and on the attached sheets.

On 19 September 1997, USEPA Region II START sampling personnel collected eleven (11) wipe samples, including one field duplicate, and Matrix Spike/Matrix Spike Duplicate, from the Color Technology site.

The wipe samples were analyzed by the Laboratory for Target Analyte List (TAL) metals following the Contract Laboratory Program (CLP) Statement of Work (SOW) number ILM04.0.

Client identification (ID) and laboratory ID numbers are as follows:

Client ID No.	Laboratory ID No.	MATRIX
BLANK	272630	WIPE
CTW01	272621	WIPE
CTW02	272622	WIPE
CTW03	272623	WIPE
CTW04	272624	WIPE
CTW05	272625	WIPE
CTW06	272626	WIPE
CTW07	272627	WIPE
CTW08	272628	WIPE
CTW09	272629	WIPE

1) Sample # CTW09 is a field duplicate of sample # CTW01.

2) Blank wipes were provided for MS/MSD.

The results presented in the data package are acceptable with the exceptions noted in the following data assessment narrative.

CRDL STANDARD RECOVERY

The following analytes were qualified as estimated "J" or rejected "red-lined" in the associated samples due to Contract Required Detection Limit (CRDL) Standard Percent Recovery (%R) is outside the quality control limits and their concentration fell within the "affected range".

ANALYTE	% RECOVERY	AFFECTED RANGE	QUALIFIER	ASSOCIATED SAMPLES
Lead	120 - 150%	2.0 - 12 ug/L	"J"	Blank

FIELD DUPLICATION ANALYSIS

The following analytes were either qualified as estimated "J" or rejected "Red-lined" in the associated field duplicate samples because the Relative Percent Difference (RPD) or Difference (Diff.) between sample CTW01 and the corresponding field duplicate sample CTW09 was outside the specified criteria.

Analyte	RPD/Diff.	Qualifier	Associated Samples
Aluminum	Diff. > CRDL	J	CTW01 & CTW09
Cadmium	Diff. > CRDL	J	CTW01 & CTW09
Mercury	Diff. > CRDL	J	CTW01 & CTW09
Nickel	Diff. > CRDL	J	CTW01 & CTW09
Zinc	RPD > 50%	J	CTW01 & CTW09

ICP SERIAL DILUTION

The following positive TAL data > 10X IDL (or > MDL when the MDL is > 10X IDL) were either qualified as estimated "J" or rejected "R" because the serial dilution analysis was performed on an identified field blank.

Analyte	Control Limit	Qualifier	Associated Samples
Aluminum	454 ug/L	"J"	CTW02, CTW03, CTW04, CTW05, CTW06, CTW07 & CTW08.
Antimony	60 ug/L	"J"	CTW04, CTW05 & CTW06.
Barium	200 ug/L	"J"	CTW01, CTW02, CTW03, CTW05, CTW06 & CTW09.
Cadmium	6 ug/L	"J"	CTW02, CTW03, CTW05, CTW06 & CTW08.
Calcium	5000 ug/L	"J"	CTW02, CTW3 & CTW06.
Chromium	10 ug/L	"J"	CTW01, CTW02, CTW03, CTW04, CTW05, CTW06, CTW07, CTW08 & CTW09.
Copper	25 ug/L	"J"	CTW01, CTW02, CTW03, CTW04, CTW05, CTW06, CTW07, CTW8 & CTW09.

ICP SERIAL DILUTION (Cont'd)

Analyte	Control Limit	Qualifier	Associated Samples
Lead	20 ug/L	"J"	CTW01, CTW02, CTW03, CTW04, CTW05, CTW06, CTW07, CTW08 & CTW09.
Manganese	15 ug/L	"J"	CTW01, CTW02, CTW03, CTW04, CTW05, CTW06, CTW07, CTW08 & CTW09.
Nickel	40 ug/L	"J"	CTW02 & CTW03.
Sodium	5000 ug/L	"J"	CTW02 & CTW03.
Zinc	20 up/L	"J"	CTW02, CTW03, CTW04, CTW05, CTW06, CTW07 & CTW08.

Title: Evaluation of Inorganic Data for the Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

A:2.3 Contract Problem/Non-Compliance:

1. Due to the nature of the matrix, the laboratory used an identified field blank (blank wipe) for the "Laboratory Duplicate Analysis". Based on a professional judgement , the QC criteria for the results of this duplicate analysis were not used to qualify the associated data.

2. Due to the nature of the matrix, again, the laboratory used blank wipes for the analysis of Matrix Spike/Matrix Spike Duplicate (MS/MSD). That analysis was accepted.

3. The laboratory did not adhere to the requirements for the ICP Serial Dilution Analysis, and performed this analysis on an identified Field Blank. Therefore, the criteria for the results were applied, and the associated data were qualified accordingly.

MMB/ESAT Reviewer:	Holly Michael Signature	12/11/97 Date:
Contractor Reviewer:	_____ Signature	_____ Date:
Verified by:	_____ Signature	_____ Date:

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, New Jersey 07869
201-584-0330

SDG # CTS001

Sample link: 272610 - 272631

NONCONFORMANCE SUMMARY

All external chains of custody are copies, the originals are filed in the organic portion of this data package. The internal chain of custody is a copy, the original is filed in the organic portion of this data package.

The inorganic portion of this data package has been separated, by matrix, into two reports. The first report consists of the soil samples (272610-272620) and the second consists of the wipe samples (272621-272631). Although the samples are of two different matrices, they all belong to the same SDG.

The wipe samples were prepped and analyzed according to the soil methodology

Due to software limitations, the results are being reported in ug/m^2, instead of mg/cm^2.

Aqueous levels were used for the matrix spike and matrix spike duplicate, instead of soil levels.

The concentration reported by the ICP is derived during the ICP run by dividing the total weight of the digested wipe by the weight of the ICP portion of the wipe.

No other problems were encountered with the analysis of these samples.

REF No.: 2117

PO No.: 85146

CHAIN OF CUSTODY RECORD

copy - original filed with organics report

WESTON MANAGERS DESIGNERS/CONSULTANTS

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019
Phone: 908-225-6116 Fax: 908-225-7037

Matrix Box No.:	Preservative Box No.:
1. Surface Water	1. HCl
2. Ground Water	2. HNO3
3. Leachate	3. Na2SO4
4. Rinsate	4. H2SO4
5. Soil/Sediment	5. Other (Specify)
6. Oil	6. Ice Only
7. Waste	N. Not Preserved
8. Other (Specify)	* See Comments

Send verbal and written results to: Roy F. Weston, Inc., USEPA Region II START
Suite 201, 1090 King Georges Post Road, Edison, New Jersey 08837-3703
Attention: Smita Sumbaly, START Analytical Coordinator

Sample Number	Sample Collection MM/DD/YY/Time	Sample Matrix (Enter box #)	Conc. Low-L Med-M High-H	Sample Type Comp-C Grab-G	Sample Preserv. (Enter box #)	RAS ANALYSIS: VOA	BNA	PEST	PCB	TAL/CN	RCRA ANALYSIS: IGN	COR	REAC	OTHER
CTS-001	9/19/97/0956	5	L	G	6	X	X	X	X	X				272610
CTS-002	1000													MS/MSD 27261
CTS-003	1015													272612
CTS-004	1020													272613
CTS-005	1027													272614
CTS-006	1030													272615
CTS-007	1037													272616
CTS-008	1036													272617
CTS-009	0950													272618
CTS-010	0956													272619
CTS-011	0956													272620

Comments: 273706 - Refrigerator Blank

2.8°C

Person Assuming Responsibility for Sample: M. Mahoney

Time: 1325 Date (MM/DD/YY): 9/19/97

Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
All	M. Mahoney	1325	9/19/97		Transfer to LAB
All		1845	9-19-97	Christel M. Aug	RECEIPT AT LAB

START DATA SIGN-OFF SHEET

Task/Site: Color Technology

TDD #: 02-9709-13 **PCS #:** 2117

Sampling Date: 9/19/97 **Date Received:** _____

DCN #: _____ **Lab:** TCM

Matrix: ~~TO~~ WIPE **# Samples:** 10 **Analysis:** TAL

DATA PACKAGE CHAIN OF CUSTODY

RELINQUISHED BY:			RECEIVED BY:		
Signature:	Date:	Fraction:	Signature:	Date:	Fraction:
[signature]	11/12	Inorganic	Addy Michael	11/12/97	Inorganic

1. ☑ Data Reviewer

Addy Michael
Name

12/17/97
Date

2. ☐ Group Leader/Peer Review

_____
Name

_____
Date

3. ☐ Approval (Group Leader/ATeam Mgr.)

[signature]
Name

12/17/97
Date